complicated by the necessity to accommodate various communication protocols, data formats and data contents. Finally, we have to admit to ourselves that technology giants will be trading electronically on a peer-to-peer basis with organizations which have limited technical resources and budgets. It's also important to note here that each ILEC wants to use a single interface to communication with multiple CLECs, and vice-versa.

As a result of the significant marketing investment GEIS has made in this industry, it's become clear to us that there are two distinct camps which have evolved. These camps have evolved due to their position concerning interface format and application integration philosophy, and that is ECLite versus non-ECLite.

Those who support ECLite claim that the only way for true electronic bonding to occur is to bind the applications using ECLite's various layers and services. The non-ECLite camp says that it can satisfy the requirements of legislation and regulatory agencies by implementing alternative interfaces like EDI over TCP/IP, and to date they have done so.

It's the strategy of GE to provide flexible electronic gateway solutions to the telecommunications industry. If implemented properly, a gateway will blur the distinction between the two camps, allowing both CLEC and

ILEC to focus on single feeds to and from Legacy system. This strategy puts the burden of messaging where it belongs, on the software suppliers.

GE is busily working to address these challenges. The needs of the pre-order business function dictate that the gateway must at least be event driven to facilitate nearly real time transaction speed. Other interconnection business processes have less severe restrictions on messaging speed, while others require batch processing during predefined windows of time. An effective gateway must also be able to definitely handle a variety of external data formats, protocols and speed.

As the word "gateway" implied, an effective solution must be scaleable to the size of the trading community, as well as the needs of the internal systems.

One example I care to share with you is that trading partners relationships defined in the gateway should be able to receive and translate between EDI and ECLite as well as respond via EDI proprietary format, E-mail and even fax.

In summary, we at GEIS believe that the telecommunications industry is in an exciting time. We are delighted to be involved with it. Given the resources of the General Electric Company, our experience in electronic commerce market, and our experience in the

telecommunications industry, we believe we can fill the role as a provider of a flexible gateway solution and systems integrator for OSS interconnection applications.

We applaud each responsible organization in this industry for making bold new moves into unchartered waters as the introduction of competition into local service takes its first few steps. Congratulations. Best Wishes, and we will see you in the winner's circle.

Thank you.

MR. WELCH: Thank you, Mark.

Now we will move to the next phase, the question and answer phase, and we will ask some questions. We will direct these questions to specific people on the panel, but we encourage back and forth. If any of you want to respond, please just give us a signal.

And actually, Mark, I would like to start off with you if I could. We are fortunate to have a representative from a vendor on this particular panel.

Mark, could you tell us from the perspective of GE about some of the advantages or disadvantages of different approaches to providing new entrants access to pre-ordering? For example, Web pages or other uses of HTML or EDI or other application-to-application interfaces. What are some of your perspectives on that?

MR. SIKORA: Well, what we have seen is that there

is a tremendous split in the marketplace ECLite versus non-ECLite. And as we saw yesterday, we saw a lot of front-end systems to Legacy systems.

I believe that one will truly start to exploit and own data when they build gateways, so they can talk one way to the external world and keep their own internal systems buffered. I think we can make life easier for the ILECs, if they are able to do the same. And what that also does is it buffers these core systems and internal systems from standards changes.

So it's my belief that a gateway solution is a way to dispassionately conduct these electronic communications and maintain investments in Legacy systems, and that's especially true when you look at what the ILECs had to start out with as the source of all their data, which is a bunch of despaired Bell Corp. systems.

MR. WELCH: Does anyone on the panel want to add anything to that?

MS. BUSSING: Yes, I would like to, please.

I think beyond just the interfaces are the tools that are provided. There is a key underlining issue here, and that is getting access to the data. It is not consistent across the ILECS today on what access of information they will allow us to have. Due date information on new installs, for example, not allowed to get

that from PacBell. As you get a new customer installed, you have to call them. They will not give that information through the tools. You have to call them to get a due date to be able to tell the customer when they can have service.

There is a multitude of examples like that. I think one of the things we need support of from the Commission, from the FCC, is to help us make sure that it is equal across all of the ILECs to provide the same information and open information as to me, as the agent of the customer, to be able to provide the level of service that we need to provide in a competitive environment.

MR. WELCH: Yes, Bob.

MR. VAN FOSSEN: I believe there is a split in the marketplace, but I am not sure it's so cleanly defined as ECLite versus others. What we have seen is a marketplace where you have got the larger carriers who are very much interested in doing the systems development associated with an application to application type gateway, and EDI type gateway, if you will, the larger carriers.

In the marketplace, however, there are also a number of smaller carriers who don't necessarily have the resources or would choose to invest their capital in a way that they would use to have an app to app, and a user-to-application type interface very much meets their market needs. They don't necessary have the nationwide demands

that a larger carrier might have.

I expect there will be a permanent bifurcation of the market and will not have a single type of interface to an ILEC. You will have a user-to-systems type interface that might be very well met by Web type technology, and you will have a gateway-to-gateway type interface which will for the foreseeable future be based on our OPF/EDI directions.

MR. WELCH: Stuart?

MR. MILLER: Well, I want to join in what Rob is saying, but I think also to add that there is a time factor obviously at work here, and that is that because of the phasing and timing of the various orders that came out many of us have had to put in place interacts and protocols that clearly do not conform to national standards because the national standards don't exist, and clearly it's difficult for a CLEC to look at -- they say a 9X app-to-app interface for pre-ordering and say should I develop for this interface when I know there is a national standard coming down, and that's a very difficult decision for them to make. I think that's understood. But nevertheless, we have those interfaces in place, and they can be used should a CLEC choose to adopt that.

And so there is a whole timing factor at work here. The advantages of an Internet or a Web/GUI kind of interface offering is clearly that it can be updated and

enhanced a lot more quickly than other types of interface. It does have some disadvantages. It is by nature asynchronous as opposed to synchronous in nature. It does not provide the full capability that I think in volume as I think is supported by us that some people would want to adopt, but nevertheless it can provide the service and the service interval to the customer can be seen to be the same way. And we are certainly improving and enhancing response times for those kinds of transactions through that interface.

MR. WELCH: Okay. I would like to introduce from my staff Kalput Gude, who is sitting next to me. Kalpak has been instrument in helping organize this forum, and he's going to present a couple questions to the panel.

Kalpak?

MR. GUDE: The first question I would like to ask is to Carol. If you could describe your experience at Sprint in obtaining access to the pre-ordering functions that you listed earlier.

Also, for which pre-ordering activities is real time access necessary to meaningfully compete in the marketplace?

Also, which types of interfaces have you experienced the most success with, and why?

MS. BUSSING: Okay, three questions there. Let me

give you a couple examples of trying to get access to these tools and bring them internal to Sprint and to our integrated national service center to be able to support us in the marketplace.

There are, as you can see on the board, a variety of tools. I think it's key to understand that we have not had readily accessibility to these tools. A lot of the tools have been under development up until, and still continue to be under development as the ILECs are trying to get them in place to support competition.

We have examples where, and I mentioned the one earlier with PacBell, where we can't get due date information. We have issues with GTE where we cannot get the customer service record information. This is over the tool SIGS, which is their product. It's very difficult when you have a customer on the phone and you don't know what their as-is services are, and I will tell you today with customers who are adding lines left and right for teenagers and doing all the different things they are doing with data and things in the home, that it is key for us to be able to see that customer information so that we can make sure that if they want all those services to be moved over and add services we have the view into that to be able to make sure the customer is protected and taken care of.

I think that telephone number assignment, there

are certain pieces of information. And when I mentioned the four area -- validation of customer street address, you have to have that information real time with the customer on the line to validate that. Services that are available, the customer service address is key information also to have real time with the customer.

You can get a block of numbers or you can get downloads on number assignments and also the one area where we need real time is on customer service history, but you can bring some of that data down each day into some databases that we might have housed inside of Sprint, for example, where you could just refresh that data and have that available. It's not the most opportune way to do things. I think there is going to be a lot of movement, a lot of dynamic activities going on. And the more access we have to get to the customer information, when we have the customer on the phone is our preference.

Your last question, if you will just remind me? Was it any good experiences, I believe?

MR. GUDE: Yes, which specific interfaces have you had better experiences with and what?

MS. BUSSING: Well, let me try to answer it this way. Because we have had to accept these tools, I wouldn't say I have any good experiences with the products.

Where I would like to go is we really need to

move, and Rob mentioned it, is electronic bonding, and we know that one size does not fit all. There is a variety of things that we in the long distance division have had to do over the years to support a variety of customer needs with many, many media methods, electronic interfaces for customers, and we are in the same environment in this competitive area. To have to negotiate with our partners, the ILECS, depending on what size company you are and what kind of transaction volume you are going to have to support to make sure we build the right method, to make sure we have a very competitive environment and not to forget protecting the customer. That is the key thing here is this whole open competition, is about the customer. And today these tools do not provide me the equal level playing field, if you will, to be able to provide the same service that the ILECs can provide today.

I hope that answers what you asked.

MR. GUDE: Any other panelist like to comment on that?

MR. MILLER: I think there is one thing that clearly both sides can benefit from experience. I mean, this is one thing we are finding, that in having offers to electronic interfaces we have found all kinds of problems when we first offered them, and we worked with those problems and were able to fix them. And the only way, of

course, you can really proceed and enhance things is by getting experience.

In our case, we offered an app-to-app interface, for example, for pre-ordering transactions, but only one CLEC has chosen to build a system that will interface with that, and they had problems with it. We worked it and it's working pretty well right now.

So I think the -- and yet we have no experience, no real experience with any of the major competitors right now, and I think we welcome that kind of experience because it is going to enable the systems to clear the bugs out of them, which are going to exist -- this is the nature of computer systems -- and get on with them that way, and I think that's what we are all anxious to do.

MR. GUDE: Let me change the subject slightly, and ask Stuart. What safeguards have incumbents put in place to assure nondiscriminatory access to incumbent network personnel for the assignment of due dates?

Also, what steps have you proposed to deal with potential privacy violations resulting from multiple carriers access to CPNI?

MR. MILLER: Well, first of all, you are asking specifically about due date availability, for example, and our due date availability system in our Legacy OSS systems is used by both our retail reps and directly by CLECs coming

in to check due date availability for the services that they are offering.

The same system is being offered. The transaction that a CLEC will execute goes through the electronic interface, passes, flows through directly to our due date management system, and the response is provided directly back to the CLEC, and there is no actual human intervention in that for most of the common services, the POTS services and so on and so forth.

Where there are expanded or complex services in our own bureaus we have people in place who will be looking at that kind of due date availability for complex services. That same bureau is used by our retail reps and will be directly accessed. There is a manual process in place directly accessed by the CLEC representatives to accomplish a due date availability that would be in parity with that which is offered to our own retail customers.

In terms of the privacy of CPNI and other data, we have had to put modifications into our systems, quite extensive modifications to flag the data and who has rights to see it and who owns it. As I mentioned in my opening statement, we have a mediated access which provides the necessary checks to ensure that the CLEC has the availability only get to their own records, and our own reps do not have availability to get at their records.

MR. GUDE: Turning to a familiar topic that we talked about on the last panel, but I think it is applicable here, and that's the issue of forecasting demand and scaleability in this context.

I guess I would like to start off with you, Rob, and ask you how much capacity for use by new entrants have you built into your pre-ordering systems both in terms of the computers and services reps? And what plans do you have to accommodate increase in use by those competitors in the future?

MR. VAN FOSSEN: US West does not necessarily sit on one of the marketplaces that was in the first tier, I think, of eligibility by the larger carriers. And so unlike some of my panelist partners, we haven't been inundated with the volumes of orders, as Commissioner Majkowski was saying earlier.

However, we have been applying capacity to both the gateway solution as well as the core embedded operation systems.

The electronic gateway access provides direct electronic access to the embedded operation systems. And so when one examines the problem of capacities you can't just simply look at a gateway and say is there enough gateway, but you have to look at the operation systems itself and make sure there is sufficient opportunity in the transaction

flow on the back end systems.

What we have looked at is our high water mark for our own busy order periods, and in attempting to develop forecast for what to grow beyond that, we suffered much of the difficulties that were discussed on some of the previous panel. And without going down that path, I think what we have found is that the forecasts are for all of us at best guesses, and in some cases in some areas you can find that the market forecasts and the transaction volume forecasts will exceed the total capacity of the marketplace inside three years, so that the entire collective market will be transferred out of the ILEC to every single CLEC collectively.

So instead of using forecast data, instead of relying solely on forecast data I should say, we have also looked to the experience in the interchange marketplace for both market penetration and market churn, and used some of those estimates in order to develop some computing capacity estimates as to what's going to happen to our marketplace and our gateways. And our assumptions are that over the next three to five years that we will see on the order of a 30 percent steady state kind of churn rate coincident with what is seen in the interchange carrier marketplace, and have been putting in place both the existing capital improvements as well as the planned capital improvements to

meet that market growth.

The other key is to develop the software necessary to flow through as much of the transaction as possible.

Correcting a statement made earlier, it is true that in US West, as in many of the other ILECs, the ordering process of translating an OBF form to a US West service order is in fact mostly a manual process. However, the pre-ordering transactions, the maintenance, repair and provisioning transactions, as well as the billing transactions, are all fully mechanized. But to say that we weren't interested in mechanizing that order processing would be a fallacy. We have every interest and are starting with the conversion as-is process to develop software to enable flow-through of those orders to remove the human hands from the process, and to get the manual steps out of the process to improve the capacity of the ordering.

MR. WELCH: David, from the perspective of a new entrant trying to work with the incumbent on these types of systems, how do you internally at ACSI work with the incumbents to forecast and develop models that you are expected to man on their system and the resources?

MR. WHITE: Well, strictly speaking, we don't.

MR. WELCH: Okay.

MR. WHITE: We don't forecast our demands. We have a competitor outlook on the market, and to forecast

demand in an uncertain market where we cannot depend upon their systems having the capacity to handle the volumes that we throw at them, we find it kind of pointless, and we would rather divert our attentions toward actually marketing the services.

We entered the Bell South region, for example, in resale services on March 1st. Within three weeks, we had over 4,000 orders. Of those 4,000, 3700 were back-logged. So it was very clear to us they couldn't handle the capacity.

Could we have forecasted that? Very unlikely.

MR. WELCH: Carol, how are you all working with that at Sprint?

MS. BUSSING: Thank you. I would like to make a couple points on capacity and scaleability.

I would like to retract back to a statement that was made earlier on Ameritech, for example, on system scaleability and reports that are available. One of the things that we, once we got the documentation in writing a proprietary front-end to be able to do pre-ordering with Ameritech, we kept asking for those measurements and for those reports so that we could understand the kind of volume before I invested in developing a proprietary interface for Ameritech, to ensure that it could handle the volumes if I incur the cost to develop something, as you can see, one is

different from all the other eight options that we had there, and those reports could not be provided.

So I am anxious to see if there are some reports showing the measures and trends of how capacity can be handled through the interfaces, because right now there is not enough volume, I believe, from many of the national carriers because of the fact of some of the ways we are having to go to market, a very constrained view, to be able to prove out these interfaces.

One of the other things too that Sprint does is we step back and we do provide forecasts. But forecasting is a two-way partnership. I will tell you today that there has been significant investments in the systems, but in the local business today you are lucky if about 70 percent of the orders are done automatically or systematically. And on the business side you are lucky if 20 to 40 percent of the orders are done systematically.

Some of the things that I have been trying to position with our partners is to say you have to tell me what your constraints are also, so that we can ensure we are still taking care of the customer. If they have constraints and cannot handle more than 100 ICNs a day, then it would be great to know that. So it's a two-way deal.

I think that we owe the ILECs forecasts, to have them understand what types of volumes we would like to have

in the marketplace or in their territories, but I think out of a responsibility to protect the customer they also owe us back what their constraints are. If automation is not there yet, yes, you intend to do it over time and it takes times, and we encourage you to do that, but what is the balance back so that we can manage it together.

MR. GUDE: Stuart, you mentioned early on the likelihood that dual systems will develop in the future. How is it that you foresee these dual systems developing? Through the marketplace? Over time? Or through some assistance through standard-setting organizations? And how long are we likely to have to wait for this dual system to evolve?

MR. MILLER: Well, the dual systems I was referring to really were those that would enable smaller competitors to get into the business rapidly, and those that would also enable the larger competitors to provide and generate the volumes, deal with the volumes that they are going to generate, and clearly, they are separate issues.

And also let's not forget that that the FCC order requires us not to discriminate between those two groups of competitors, as well as with ourselves, which is a very difficult task to undertake when the nature of those systems are dramatically different, because the investment required, admitted by a large competitor, to provide an app to app or

electronic binding interface is sizeable, which a small competitor would not be able to undertake.

How do I see these developing in the future? Well, clearly, this is the national standards issue. As far as a Web/GUI nor Internet-based system is concerned, I think in reality there will be differences, as Carol pointed out, between the various ILECs who offer these capabilities. That it would be nice to be able to come up with some standardization towards that. I think it's relatively easier to accomplish if there could be agreements among the various participants to do that because the implementation time and cost and complexity is a lot less.

In terms of the app-to-app interfaces, clearly there is a synergy that must exist between the national standards bodies and whatever role the FCC can play in that, and the marketplace as it develops. I think we are all experiencing some early birth pains, perhaps, of trying to bring about similarity between the major competitors who want to enter this business and the different interface requirements that they have, and the national standards forums.

I would not like to predict right now how the outcome is going to occur -- is going to come, because I think in trying to mediate between the various large carriers and also play the participatory role in national

standards is a very complex thing for everybody. So I think any catalytic role that FCC or some other body could take would be definitely advantageous.

MS. BUSSING: Can I just add a comment? Do you mind?

There is a position that the LCUF, Local Competition Users Forum, has taken on pre-order, and we worked very hard over the last couple of months to put together a pre-order requirement that is very much along the lines of what's being addressed in the issues throughout the industry standards. But that process is moving a little slow.

For AT&T, Sprint, LCI and World Com, and MCI, to be able to go into business in this environment is just not, it's just not appropriate. So we have to drive and build something more on an electronic app to app on the front-end. What we really need to see happen is that the ILEC partner up and also give it the kind of attention that we are trying to give it to be able to move us forward in a competitive environment, and I'm not so sure we have everybody focusing. And I think part of it is because of what they have had to do to meet the immediate order and they have put a lot of energy and time and they have a lot of resources focused to this effort with the GUIs, we have got to get that turned around and get it focused on what I believe is really going

to open up competition and get the next level of interfaces built, but it's going to have to be a very focused priority, and hopefully pushed, and it would be nice if it was a time bound position from the FCC to help us get that rolling.

MR. WELCH: Yes, Rob.

MR. VAN FOSSEN: I think it should be understood that no ILEC, and certainly US West has no interest in maintaining multiple interfaces that are functionally different. I think Mark was making the point earlier that the back-end view to the OS is should be as common as possible in order to provide functions on an nondiscriminatory basis as Stu was saying earlier, but also on a cost basis. I don't think you are going to see the marketplace diverging to where the functions that are available from an EDI gateway are markedly different from the functions that are available on a user-to-application basis.

You will see different technologies, different access methods used in order to obtain access to those functions, but the cost drivers alone, aside from the market drivers, will keep the functions in common.

MR. WELCH: Okay, we have about five minutes left so we have time for a couple questions from the audience. If anyone would like to pose a question to the panelists on the topic of pre-ordering. So if you could please state

your name and direct your question to a specific person.

MR. BLANK: Yes, hello. I am Larry Blank, staff economist with the Nevada Public Service Commission. I have two quick questions.

First, on the issue of CLEC demand forecasting to the two ILEC represented here, I am curious what penalty d you propose when a CLEC submits a demand forecast which is in error? It seems to me that the accuracy of those forecasts is directly dependent on your performance, and therefore it seems silly to me to penalize a CLEC because the ILEC is performing poorly.

Secondly, to Ms. Bussing, since my agency regulates -- let me back up. Your company owns the largest ILEC regulated by my agency, so I am curious as to how Sprint's ILEC operations have lived up to the performance standards that you have suggested here?

Thank you.

MR. RUSSELL: Yes, I will answer the first question very briefly first by saying that I don't really want to get in here into a business discussion about what penalties might be appropriate for inaccurate forecasting.

I think we recognize that we would like to get almost anything right now, and there are a variety of validation checks that will perform, because what we are using them for right now is to be able to place the right

capacity into operation, and we recognize that the businesses are unknown, churn factors are unknown, et cetera, et cetera. There is a lot of indecision about that. But I don't want to get into the issues of penalties right now.

MR. VAN FOSSEN: In our experience, in US West, we have not been successful at the contractual level in negotiating binding forecasts. We are at the same point of any data that you can share will be better than no data at all. The forecasts, in fact, are considered nonbinding but are informatory in giving us at least the best heads up that can be made available in the marketplace.

MS. BUSSING: In answering the question of Sprint's CLEC and ILEC business, the way I would like to position that is our local division is doing exactly what I think everybody else is doing, which is trying to provide tools to allow MCI, AT&T and everyone to get into the market. Internally, we are seeing an enormous amount of time in looking at electronic bonding together so that as we build that for the CLEC role, we will also have that for the ILEC role and provide that for competition.

I don't know if that will completely answer your question, but, you know, they are taking the steps -- one tune won't answer all. I think we have identified that a lot of these GUI applications, which is one of the things

our local division is also going to provide, they are in the process of testing. The will be providing an application for smaller CLECs, and this may fit for a long time for smaller CLECs. We have talked about EDI TCP/IP, which is another tier of protocol I think that can be supported for a certain volume of business in a batch mode. And then you have got to get into something that is truly real time, five second or less electronic bonding, which is exactly what the national carriers need.

MR. WELCH: I think we have time for maybe one more question from the audience if anyone has one.

MS. COLIFER: I am Anne Colifer with US One.

I would like to ask the panelists whether they believe the proper data sets of information are being made available through these pre-ordering interface, or are there data elements that you need that are not being available either as a matter of policy or as a matter of just business practice by the incumbents.

For example, one of the problems that we have encountered is that we have requested the identification of the location of the network interface device as part of the pre-ordering so that when a technician is dispatched to the home or to the apartment you know where that is located, and we have had difficulty getting that from some of the incumbents.

Are there other kinds of data elements that you think are critical to a successful order process that aren't being made available?

MS. BUSSING: Yes, I think I mentioned a few of those. Consistent customer service information, I think is key in making sure that we have a good, full understanding of that customer's service today. Due date information, I know that as we are all uncovering what we are going to need to do in sure of UNE and combinations of those, that there will be more and more of those things that come up and that needs to be uniform, that we can get that information equally across from all the incumbents.

MR. VAN FOSSEN: As the requestee of pre-order transactions, we have seen dependencies in information that's normally contained in an order, such as the services ordered, that are absolutely critical for doing a good job on due date scheduling another aspects of pre-order in terms of facility availability, for example, that aren't necessarily thought of when the pre-order transaction is independent and happening significantly in advance of the order, whereas what we would like to see is something that is much more synergistic between the pre-order and the ordering process to represent that co-dependency.

MR. WELCH: Okay, I think that concludes this panel. I would like to thank our panelists, Mark Sikora,